

# Work Order ID 52411

September 23, 2009 1:50:54 PM

Page 1

Item ID: D206-642-541

Reference:

Revision ID: M

Item Name: Replacement Skidtube

Start Date: 9/23/09

Start Qty: 1.00

Cust Item ID:

Required Date: 10/08/09

Req'd Qty: 1.00

Customer ID:

Customer Name:

Approvals:

Process Plan:

CY MP

Date:

09/09/24

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

## Hours

Sequence ID	Work Center ID	Operation Description	Set Up	Run	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr

Revision Nbr

IIN-D206-642

Rev M

100

DC

0.00

0.00

Document Control

DOCUMENT CONTROL

Memo

Photocopy bluefile & type labels per PPP D206-642-541  
CHG003

N/A

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Work Order ID 52411

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Item ID: D206-642-541

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Customer ID:

Customer Name:

Approvals:

Process Plan:

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

## Hours

Sequence ID	Work Center ID	Operation Description	Set Up	Run	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
110	Skidtubes	Skidtubes	0.00	0.00							
	Skidtubes										
	Memo	1- Bend FWD end of tube using bend prog D3274 FWD dwg D3274, cut fwd end of tube with saw table setup D3274.									
		2- remove fwd indexing ridge as per dwg D3274. Prepare for welding									
		3- weld fwd cap as per dwg D3274 and QS1004 AR Aluminum Rod Batch: <u>M109213</u>									
		4- grind fwd cap weld on top surface only									
		5- Cut AFT end of tube at 170.9" as per dwg D3274 and deburr end.									
		6-Drill Aft cap pilot hole using DT8025									
		7 -Cleco DT8025 in position and install pilot hole drill Jig DT8742A,B,C,D. Drill 3/16" pilot holes as per Dwg D3274									
		8 -Remove inner indexing ridge on aft end of skidtube as per Dwg D3274 scribe batch #									
		9 -Open aft end cap holes to Ø0.208" as per Dwg D3274. Deburr aft end.									

DP 9-9-29

AWM 9-9-29  
PD 09.09.30

DP  
9-9-30

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

September 23, 2009 1:50:59 PM

**Reference:**

Revision ID: M

**Item Name:** Replacement Skidtube

**Start Date:** 9/23/09      **Start Qty:** 1.00

**Cust Item ID:**

**Required Date:** 10/08/09      **Req'd Qty:** 1.00

**Customer ID:****Customer Name:**

**Approvals:** \_\_\_\_\_ **Process Plan:** \_\_\_\_\_ **Date:** \_\_\_\_\_ **Tooling:** \_\_\_\_\_ **Date:** \_\_\_\_\_

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

## Hours

[illegible]

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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**NOTE:** Date & initial all entries

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Item ID: D206-642-541

Reference:

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Item Name: Replacement Skidtube

Start Date: 9/23/09

Start Qty: 1.00

Cust Item ID:

Required Date: 10/08/09

Req'd Qty: 1.00

Customer ID:

Customer Name:

Approvals:

Process Plan:

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

## Hours

Sequence ID	Work Center ID	Operation Description	Set Up	Run	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150	Skidtubes	Skidtubes	0.00	0.00							
		<b>Memo</b>									
		1-Open Ø0.313" and 0.375" crossbolt spacer holes using DT8743 as per Dwg D3274									
		2-Deburr crossbolt spacer holes as per Dwg D3274 and blow out chips from inside the tube									
		3-Bond web in place as per Dwg D3274 & QSI 015.									
		A/R: <input type="checkbox"/> Sikaflex-291 <input checked="" type="checkbox"/> <u>M112391</u> <input type="checkbox"/>									
		Sikaflex expire date: <input type="checkbox"/> <u>02/30/2010</u> <input type="checkbox"/>									
		Start: <input type="checkbox"/> <u>9-9-30</u> <input type="checkbox"/> Time: <input type="checkbox"/> <u>3:30 PM</u> <input type="checkbox"/>									
		Finish: <input type="checkbox"/> <u>9/10/1</u> <input type="checkbox"/> Time: <input type="checkbox"/> <u>8:45 AM</u> <input type="checkbox"/>									
		(Adhere for 12 hours)									

160 QC  
Quality Control

**Memo**

QC5- Inspect part completeness to step on W/O

0.00

0.00

→ S 02/10/01

⊙

✓

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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NOTE: Date & initial all entries



# Work Order ID 52411

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Item ID: D206-642-541

Reference:

Revision ID: M

Item Name: Replacement Skidtube

Start Date: 9/23/09

Start Qty: 1.00

Cust Item ID:

Required Date: 10/08/09

Req'd Qty: 1.00

Customer ID:

Customer Name:

Approvals:

Process Plan:

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

## Hours

Sequence ID	Work Center ID	Operation Description	Hours		Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
			Set Up	Run							
170	Skidtubes	Skidtubes	0.00	0.00							
	Skidtubes										
	Memo	1-Bend AFT end of tube using bend prog. D3274 AFT as per dwg D3274. Install drop pins in crossbolt spacer holes to maintain web position.									
		2- DRILL PILOT HOLES FOR WEARPLATES USING D3274-1T2 OPEN HOLES TO .297" ; Deburr									
		3-DRILL TOE PIN HOLE .640" DIA AS PER DWG USING DT8935 FWD END OF TUBE DEBURR INSIDE OF HOLE AS NECESSARY (DO NOT ENLARGE HOLES) REMOVE ANY FOREIGN OBJECTS INSIDE OF TUBES									
		4- Countersink crossbolt spacer holes as per Dwg D3274									
		5- prepare for welding									
180	QC	QC5- Inspect part completeness to spec on W/O	0.00	0.00							
	Quality Control										
	Memo										

DP 9-10-1

DP 9-10-5

DP 18

27 Sorlos

42

h = 2.825  
L = 4.5°

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D206-642-541 PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes ☒ No ☐ DQA: A Date: 09-11-06

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR: <u>52411</u>		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
<del>09-10-07</del> 09.10.01	170	Height of c8r head is 2.875"	CP 09.10.01 per OSI 042	Acceptable	 9-10-6	S 07/10/06	CP 09.10.01 per OSI 042	S 07/10/06

NOTE: Date & initial all entries

# Work Order ID 52411

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Item ID: D206-642-541

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Revision ID: M

Item Name: Replacement Skidtube

Start Date: 9/23/09

Start Qty: 1.00

Cust Item ID:

Required Date: 10/08/09

Req'd Qty: 1.00

Customer ID:

Customer Name:

Approvals: Process Plan:

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

## Hours

Sequence ID	Work Center ID	Operation Description	Set Up	Run	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
190	Skidtubes	Skidtubes	0.00	0.00							
		<b>Memo</b> 1-Insert D2649 & D3275-1 crossbolt spacers. Weld as per QSI 004 and Dwg D3274. Remember to back drill each hole before welding the other side. Use aluminum rod A/R [ ] Aluminum Rod [ ] <i>11/09213</i> 3-Grind cross bolt welds flush as per Dwg D3274. <i>DP 9-10-06</i> 4-Counterbore 5/16" x 0.750" deep as per Dwg D3274. Use DT8743 visual aid Jig and deburr. <i>FE 09/10/13</i>									
200	QC	QC5- Inspect part completeness to step on W/O	0.00	0.00	<i>2) 807/10/14</i>			<i>(4)</i>	<i>9</i>		
	Quality Control	<b>Memo</b>									
210	QC	QC10- Inspect visual per QSI004- ground welds	0.00	0.00	<i>2) 807/10/14</i>			<i>(+0)</i>	<i>6</i>		
	Quality Control	<b>Memo</b>									
220	HandFinish	Pressure Wash per QSI005 4.3	0.00	0.00							
	Hand Finishing	<b>Memo</b>			<i>BL 09-10-19</i>			<i>(1)</i>			

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Work Order ID 52411

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Item ID: D206-642-541

Reference:

Revision ID: M

Item Name: Replacement Skidtube

Start Date: 9/23/09

Start Qty: 1.00

Cust Item ID:

Required Date: 10/08/09

Req'd Qty: 1.00

Customer ID:

Customer Name:

Approvals:

Process Plan:

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

## Hours

Sequence ID	Work Center ID	Operation Description	Set Up	Run	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
230	Powdercoat	White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum	0.00	0.00							
	Powder Coating	<i>m 112260</i>	<i>BR</i>	<i>09-10-19</i>				<i>(1)</i>			
	Memo	START TIME: <i>10:00</i> OVEN TEMPERATURE: <i>320°</i> FINISH TIME: <i>10:30</i>									
240	QC	QC3- Inspect Part Finish	0.00	0.00							
	Quality Control							<i>X1</i>			
	Memo		<i>UMB</i>	<i>09/10/20</i>							
250	HandFinish	HandFinishing	0.00	0.00							
	Hand Finishing							<i>X1</i>			
	Memo	1-Install Nut Plate as per Dwg D3274. Apply LPS-3 to Nut Plate and rivets. A/R(U/N/A) LPS-311 <i>u/n</i>									
		2-Install inserts as per Dwg D3274. Use a drop of Sikaflex inside insert holes a A/R(U/N/A) Sikaflex-291 <i>m 112391</i> Sikaflex expire date: <i>10/20</i>									
260	QC	QC5- Inspect part completeness to step on W/O	0.00	0.00							
	Quality Control										
	Memo	Inspect Nut Plate & Inserts						<i>(20)</i>	<i>9</i>		

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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**NOTE:** Date & initial all entries



# Work Order ID 52411

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Item ID: D206-642-541

Reference:

Revision ID: M

Item Name: Replacement Skidtube

Start Date: 9/23/09 Start Qty: 1.00

Cust Item ID:

Required Date: 10/08/09 Req'd Qty: 1.00

Customer ID:

Customer Name:

Approvals: Process Plan: Date: Tooling: Date:

QC: Date: SPC (Y/N): Date:

## Hours

Sequence ID	Work Center ID	Operation Description	Set Up	Run	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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300	QC	QC21- Final Inspection - Work Order Release	0.00	0.00							
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Quality Control

Memo

09/10/22

MF

09-10-23

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

September 23, 2009 1:50:31 PM

Page 1

Work Order ID: 52411

Parent Item: D206-642-541RevM

Parent Item Name: Replacement Skidtube

Comments:

Start Date: 9/23/09

Required Date: 10/08/09

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
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D2600-1-190RevD1 Manufactured

No

110

Each

74.0000

1.0000



Extrusion Round 3" 206

9-9-29

## Warehouse

## Loc Qty

## Loc Code

### Location

Main Warehouse

ST

74

47575

74

110

Each

34.0000

12.0000

D3285-1RevA

Manufactured

No



Cap

## Warehouse

## Loc Qty

## Loc Code

### Location

Main Warehouse

ST

34

47635

34

150

Each

10.0000

1.0000

D3282-041RevC

Manufactured

No



Float Web (206L/407)

## Warehouse

## Loc Qty

## Loc Code

### Location

Main Warehouse

LG

10

48389

10

DP 9-9-30

1

1 PD 09.09.30

1

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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Page 2

Work Order ID: 52411

Parent Item: D206-642-541RevM

Parent Item Name: Replacement Skidtube

Comments:

Start Date: 9/23/09

Required Date: 10/08/09

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D2649RevB1		Manufactured	No			190	Each	711.0000	1.0000			



Cross Bolt Spacer

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
Main Warehouse		
LG	83	
51529	83	
Main Warehouse		
ST	628	
36013	5	
47112	383	
48271	240	

D3275-1RevA1

Manufactured No

190

Each

100.0000

12.0000



Crossbolt Spacer

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
Main Warehouse		
ST	100	
47464	1	
48117	43	
48270	56	

12 SE 09/09/06

12 SE 09/09/06

September 23, 2009 1:50:32 PM

Shop Packet Print

Page 2

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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Parent Item: D206-642-541RevM

Parent Item Name: Replacement Skidtube


Comments:

Start Date: 9/23/09

Required Date: 10/08/09

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
CR3212-4-03  Cherry Rivet		Purchased	No			250	Each	314.0000	2.0000			

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST

314

111359

96

112314

200

15984

18

D3415-041RevB

Manufactured

No

250

Each

95.0000

1.0000



Nut Plate

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST

95

33842

95

CCR264SS3-3

Purchased

No

250

Each

271.0000

2.0000



Cherry Rivet

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST

271

111548

56

111827

115

112314

100

X2 MD 09/10/20

X1 MD 09/10/20

X2 MD 09/10/20

September 23, 2009 1:50:32 PM

Shop Packet Print

Page 3

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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# Picklist Print

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Page 4

Work Order ID: 52411

Parent Item: D206-642-541RevM

Parent Item Name: Replacement Skidtube

Comments:

Start Date: 9/23/09

Required Date: 10/08/09

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
ALS4-1032-130		Purchased	No			250	Each	5,439.000	78.0000			



Insert

## Warehouse

## Loc Qty

## Loc Code

### Location

Main Warehouse

ST

110511

42772

5439

5439

X78 MD 09/10/20

D3536-15RevA

Manufactured

No



Gasket

270

Each

43.0000

1.0000



## Warehouse

## Loc Qty

## Loc Code

### Location

Main Warehouse

ST

47711

48159

51600

43

5

12

26

X1 MD 09/10/20

September 23, 2009 1:50:32 PM

Shop Packet Print

Page 4

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

September 23, 2009 1:50:33 PM

Work Order ID: 52411

Parent Item: D206-642-541 RevM

Parent Item Name: Replacement Skidtube

Comments:

Start Date: 9/23/09

Required Date: 10/08/09

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	--------------------------	---------------	----------------	--------

D3536-23RevA

Manufactured

No

270

Each

32.0000

1.0000



Gasket

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

FP

12

51609

12

Main Warehouse

ST

20

30754

1

47713

19

D3536-35RevA

Manufactured

No

270

Each

41.0000

1.0000



Gasket

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST

41

48160

15

51628

26

X1 MD 09/10/20

X1 MD 09/10/20

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

September 23, 2009 1:50:33 PM

Page 6

Work Order ID: 52411

Parent Item: D206-642-541RevM

Parent Item Name: Replacement Skidtube

Start Date: 9/23/09

Required Date: 10/08/09

Comments:

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D3536-39RevA		Manufactured	No			270	Each	30.0000	1.0000			



Gasket

Warehouse Loc Qty Loc Code

Location

Main Warehouse

FP

12

51637

12

Main Warehouse

ST

18

44648

1

47714

6

48161

11

D3535-15RevB

Manufactured

No

270

Each

15.0000

1.0000



Wearshoe

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST

15

30750

4

42233

1

48155

10

XI MD 09/10/20

XI MD 09/10/20

September 23, 2009 1:50:33 PM

Shop Packet Print

Page 6

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

September 23, 2009 1:50:34 PM

Work Order ID: 52411

Parent Item: D206-642-541RevM

Parent Item Name: Replacement Skidtube

Comments:

Start Date: 9/23/09

Required Date: 10/08/09

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	--------------------------	---------------	----------------	--------

D3535-35RevB

Manufactured

No

270

Each

12.0000

1.0000



Wearshoe

## Warehouse

## Loc Qty

## Loc Code

### Location

Main Warehouse

ST

12

48157

12

D3535-39RevB

Manufactured

No

270

Each

15.0000

1.0000



Wearshoe

## Warehouse

## Loc Qty

## Loc Code

### Location

Main Warehouse

ST

15

47525

2

48158

13

D3535-23RevB

Manufactured

No

270

Each

13.0000

1.0000



Wearshoe

## Warehouse

## Loc Qty

## Loc Code

### Location

Main Warehouse

ST

13

48156

13

XI MD 09/10/20

XI MD 09/10/20

XI MD 09/10/20

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



# Picklist Print

September 23, 2009 1:50:35 PM

Work Order ID: 52411

Parent Item: D206-642-541RevM

Parent Item Name: Replacement Skidtube



Comments:

Start Date: 9/23/09

Required Date: 10/08/09

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D3537-3RevC		Manufactured	No			270	Each	72.0000	1.0000			
												
Wearpad												

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST

72

30758

8

33881

17

35697

47

D3537-1RevC

Manufactured No

270

Each

192.0000

9.0000



Wearpad

Warehouse Loc Qty Loc Code

Location

Main Warehouse

FP

30

48288

2

50321

28

Main Warehouse

FP17

162

51678

162



X1 MD 09/10/20

X8 MD 09/10/20

X1 MD 09/10/20

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

September 23, 2009 1:50:42 PM

Work Order ID: 52411



Parent Item: D206-642-541RevM



Parent Item Name: Replacement Skidtube

Start Date: 9/23/09

Required Date: 10/08/09

Comments:

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
AN960C10L		Purchased	No			270	Each	6,864.000	80.0000			



washer

Warehouse  
Location

Loc Qty

Loc Code

OFFSHORE

FG

100

103585

100

Main Warehouse

ST

6764

112116

1764

112612

5000

AN960C416

Purchased

No

270

Each

706.0000

1.0000



washer

Warehouse  
Location

Loc Qty

Loc Code

Main Warehouse

ST

706

100993

706

~~180~~ MD 09/10/20

~~11~~ MD 09/10/20

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

September 23, 2009 1:50:43 PM

Work Order ID: 52411

Parent Item: D206-642-541RevM

Parent Item Name: Replacement Skidtube

Comments:

Start Date: 9/23/09

Required Date: 10/08/09

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D3672-1RevB		Manufactured	No			270	Each	1,186.000	2.0000			



Phenolic Washer



Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST 686

39275 19

42329 121

47628 546

Main Warehouse

ST117 500

51674 500

X2 MD 09/10/20

AN3C4A

Purchased

No

270

Each

1,976.000 80.0000



BOLT



Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST 1976

112082 14

112314 140

112612 146

112720 1176

112724 500

112794

X22 MD 09/10/20  
X58

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

September 23, 2009 1:50:48 PM

Work Order ID: 52411

Parent Item: D206-642-541RevM

Parent Item Name: Replacement Skidtube

Comments:

Start Date: 9/23/09

Required Date: 10/08/09

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	--------------------------	---------------	----------------	--------

AN4C5A		Purchased	No			270	Each	603.0000	1.0000			
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BOLT

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST

603

104936

19

110552

82

112243

500

18918

2

D2646RevC

Manufactured No

270

Each

56.0000

1.0000



Aft Cap

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST

56

20208

0

43801

1

46327

6

48109

49

XI mo 09/10/20

XI mo 09/10/20

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



# Picklist Print

September 23, 2009 1:50:48 PM

Work Order ID: 52411



Parent Item: D206-642-541RevM



Parent Item Name: Replacement Skidtube

Start Date: 9/23/09

Required Date: 10/08/09

Comments:

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D3413-1RevA		Manufactured	No			270	Each	22.0000	1.0000			



Ring



<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
Main Warehouse		
ST	22	
48123	22	

81 MO 09/18/20

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

**DART**

RELEASED

07.02.12

DEO ATTACHED

DESIGN CP	DRAWN BY PH	DART AEROSPACE USA, INC. PORT HADLOCK, WA	
CHECKED #	APPROVED #	DRAWING NO. D3274	REV. D SHEET 1 OF 4
DATE 06.12.19		TITLE SKIDTUBE ASSEMBLY	SCALE NTS
A	04.03.15	NEW ISSUE	
B	04.08.09	MOVE SADDLE HOLE: 42.14 WAS 42.76	
C	05.03.16	ADD -043; NEW INSERTS	
D	06.12.19	NEW INSERTS, SS WEARSHOE + GASKET	

Qty -041	Qty -043	Part Number	Description
X		D3274-041	SKIDTUBE ASSEMBLY
	X	D3274-043	SKIDTUBE ASSEMBLY
1	1	D2600-1-240	EXTRUSION
1	1	D2646	AFT CAP
12	12	D2649	CROSS BOLT SPACER
12	37	D3275-1	CROSS BOLT SPACER
1	1	D3282-041	FLOAT WEB
1	1	D3285-1	CAP
1	1	D3413-1	RING
1	1	D3415-041	NUT PLATE
1	1	D3535-15	WEARSHOE
1	1	D3535-23	WEARSHOE
1	1	D3535-35	WEARSHOE
1	1	D3535-39	WEARSHOE
1	1	D3536-15	GASKET
1	1	D3536-23	GASKET
1	1	D3536-35	GASKET
1	1	D3536-39	GASKET
9	9	D3537-1	WEARPAD
1	1	D3537-3	WEARPAD
78	78	ALS7-1032-130	INSERT (or AKS4-1032-130, ALS4-1032-130, AELS-1032-130)
80	80	AN3C4A	BOLT
1	1	AN4C5A	BOLT
1	1	AN960C416	WASHER
80	80	AN960C10L	WASHER
2	2	CCR264SS3-3	RIVET
2	2	CR3212-4-03	RIVET
2	2	NAS1515H3L	WASHER

**GENERAL NOTES:**

- TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
- DAMAGE TOLERANCE ON FWD BEND:  
THERE SHOULD BE NO VISIBLE WRINKLES IN THE BEND FROM THE GROUND TO A HEIGHT OF 7 INCHES ABOVE THE GROUND. IT IS ACCEPTABLE TO POLISH OUT GOUGES UP TO 0.020 DEEP IN THE BENT PORTION OF THE TUBE. A MAXIMUM REDUCTION IN DIAMETER OF 0.150" IS ACCEPTABLE IN THE BENT PORTION OF THE TUBE.
- ALL HOLES DRILLED ON CENTERLINES.
- BOND D3282-041 FLOAT WEB INTO D3274-1/-3 OUTER TUBE WITH NON-STRUCTURAL SIKAFLEX-241/291 ADHESIVE PER DART QSI 015. ENSURE HOLES LINE-UP.
- WELDING TO BE DONE PER DART QSI 004.
- FINISH: - ACID ETCH, ALODINE ASSEMBLY PER DART QSI 005 4.1  
- POWDER COAT WHITE (REF. 4.3.5.1) PER DART QSI 005 4.3
- DRILL Ø0.297 HOLES FOR ALS7-1032-130 INSERTS USING DT3274-1T2 BEFORE FINISH. INSTALL ALS7-1032-130 INSERTS AFTER FINISH. SEAL WEARSHOE BOLTS WITH SIKAFLEX -241/-291.
- SPRAY INSIDE OF TUBE WITH A COAT OF LPS LABORATORIES "LPS-3" AFTER FINISH AND INSTALLATION OF INSERTS. COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY, CLEAN EXCESS OFF POWDER COATING WITH MEK DEGREASER.

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

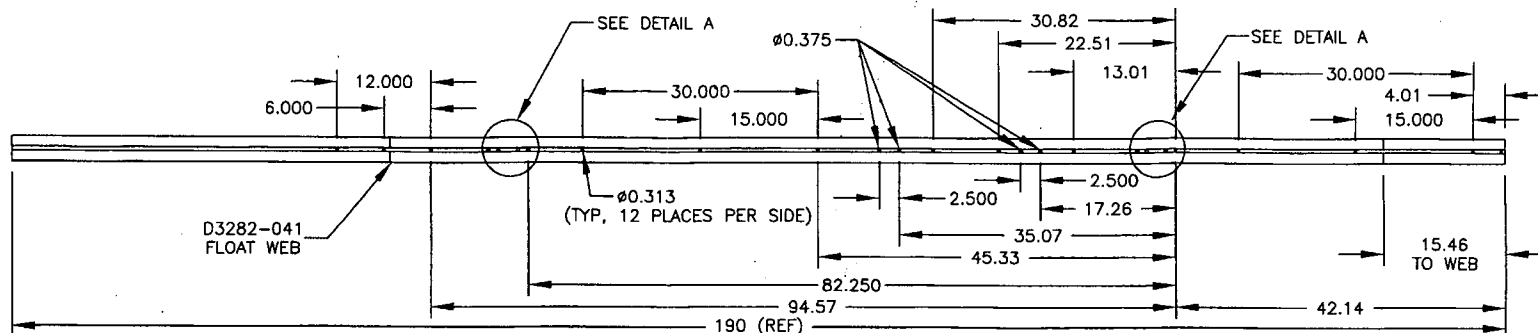
Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

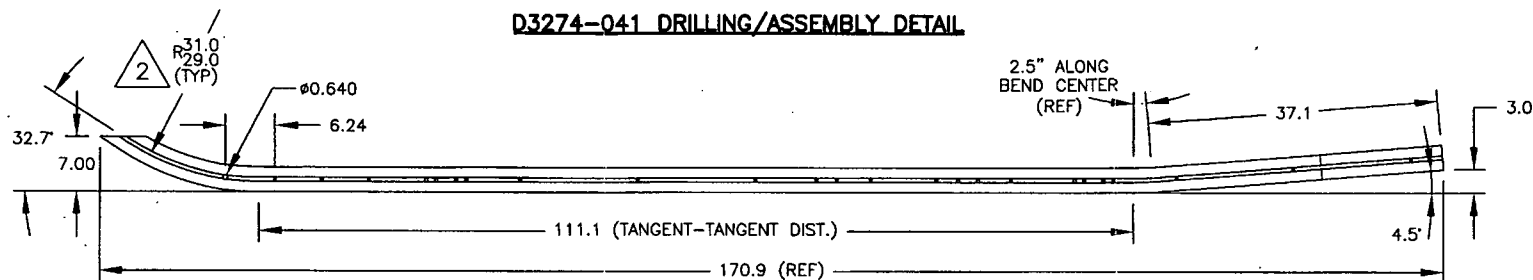
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

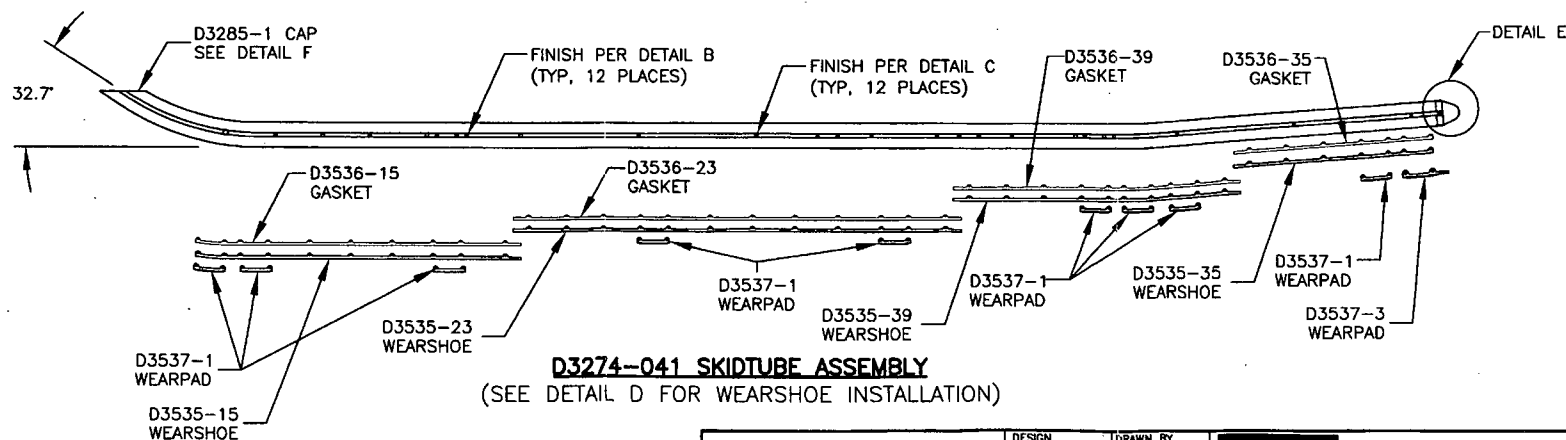
DEO ATTACHED



**D3274-041 DRILLING/ASSEMBLY DETAIL**



**D3274-041 BEND/DRILLING DETAIL**



**D3274-041 SKIDTUBE ASSEMBLY**  
(SEE DETAIL D FOR WEARSHOE INSTALLATION)

RELEASED

07.02.12

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DESIGN	CP	DRAWN BY	PH	<b>DART</b> DART AEROSPACE USA, INC. PORT HADLOCK, WA
CHECKED	#	APPROVED	#	DRAWING NO. D3274
DATE	06.12.19	TITLE	SKIDTUBE ASSEMBLY	REV. D SHEET 2 OF 4 SCALE 1:15

5244

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

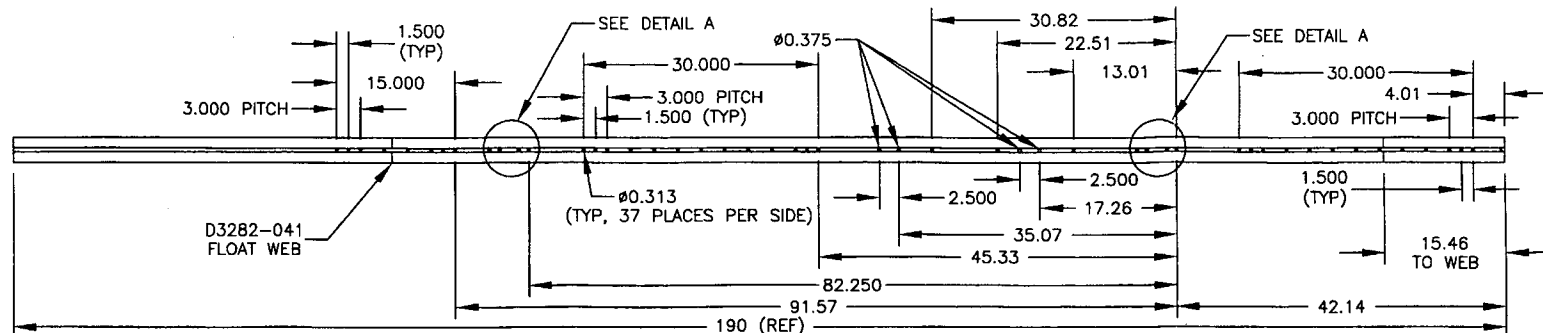
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Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

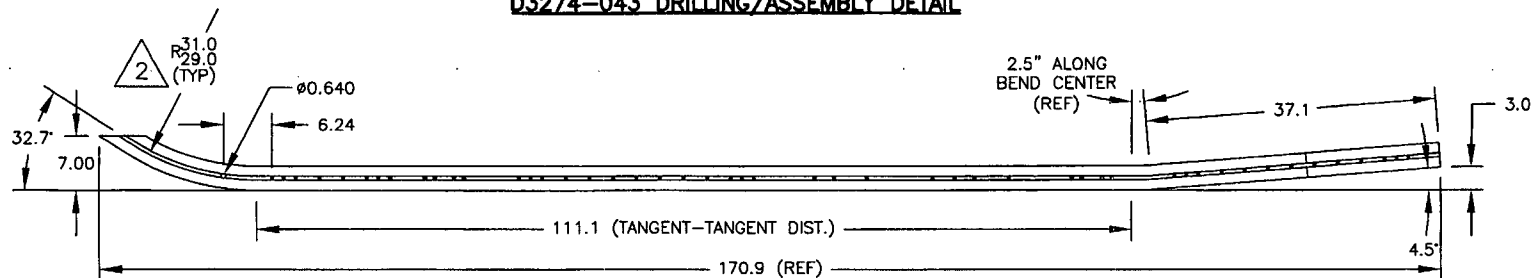
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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

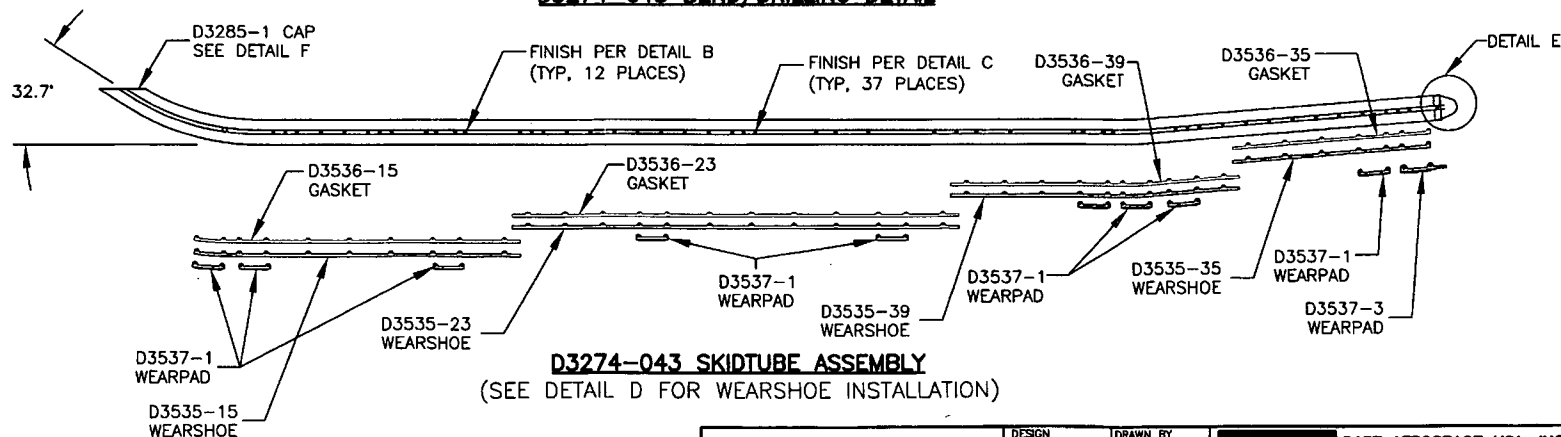
DEO ATTACHED



**D3274-043 DRILLING/ASSEMBLY DETAIL**



**D3274-043 BEND/DRILLING DETAIL**



**D3274-043 SKIDTUBE ASSEMBLY**  
(SEE DETAIL D FOR WEARSHOE INSTALLATION)

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07.02.12

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DESIGN CP	DRAWN BY PH	<b>DART</b> DART AEROSPACE USA, INC. PORT HADLOCK, WA
CHECKED H	APPROVED H	DRAWING NO. D3274
DATE 06.12.19	TITLE SKIDTUBE ASSEMBLY	REV. 0 SHEET 3 OF 4 SCALE 1:15

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

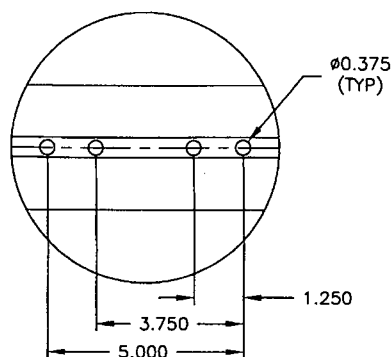
Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

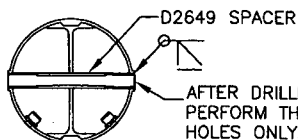
**NOTE:** Date & initial all entries



# **DETAIL A: DRILL DETAIL**

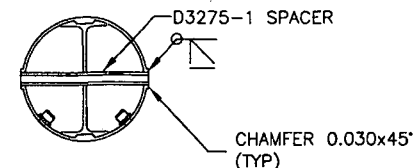


# **DETAIL B** FOR 0.375 HOLES ONLY

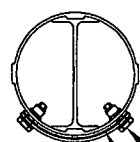


- AFTER DRILLING AND BENDING ASSEMBLY  
PERFORM THE FOLLOWING FOR 0.375  
HOLES ONLY:
1. CHAMFER HOLE 0.030x45°
  2. INSERT D2649 SPACER
  3. WELD INTO PLACE AND GRIND FLUSH
  4. C'BORE TO 0.313x0.75 DEEP

# **DETAIL C** FOR 0.313 HOLES ONLY



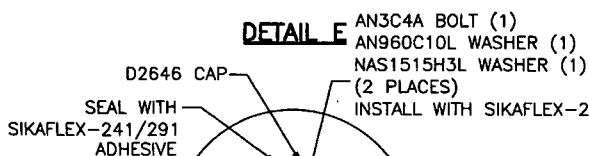
# **DETAIL D**



- ALS7-1032-130 INSERT (1)  
AN3C4A BOLT (1)  
AN960C10L WASHER (1)  
(78 PLACES)

GASKET/WEARSHOE/WEARPAD (REF)

# **DETAIL E**



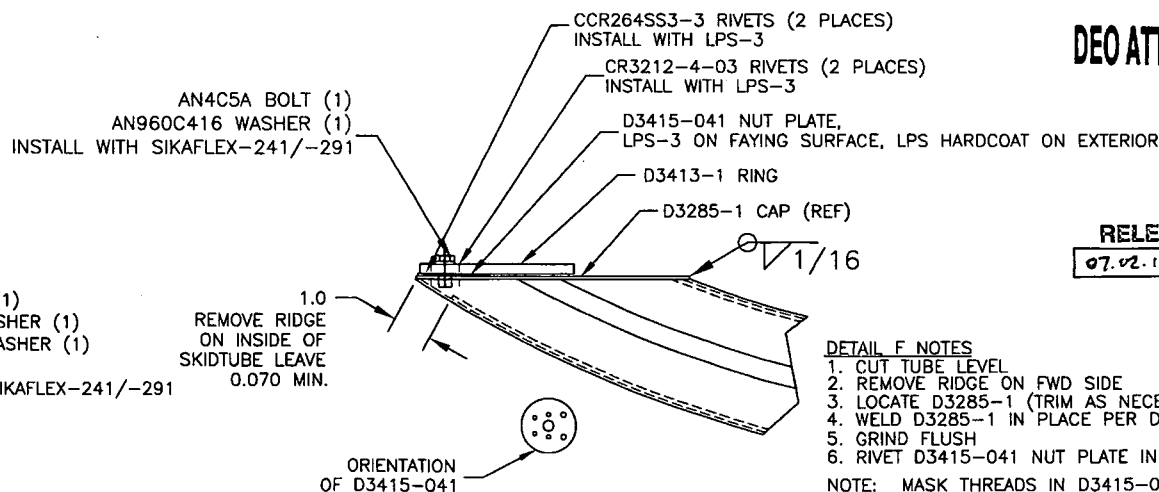
- AN3C4A BOLT (1)  
AN960C10L WASHER (1)  
NAS1515H3L WASHER (1)  
(2 PLACES)  
INSTALL WITH SIKAFLEX-241/-291

0.208 (2 PLACES)  
DRILL PRIOR TO INSTALLING  
D2646 CAP

BORE OUT END OF SKIDTUBE  
TO 0.75 DEPTH AND 0.070 WALL

0.400

# **DETAIL F: END FINISHING DETAIL**



# **DETAIL F NOTES**

1. CUT TUBE LEVEL
2. REMOVE RIDGE ON FWD SIDE
3. LOCATE D3285-1 (TRIM AS NECESSARY)
4. WELD D3285-1 IN PLACE PER DART QSI 004
5. GRIND FLUSH
6. RIVET D3415-041 NUT PLATE IN PLACE

NOTE: MASK THREADS IN D3415-041  
PRIOR TO FINISH

**DEO ATTACHED**

**RELEASED**

07.02.12

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DART AEROSPACE USA, INC.

DESIGN

CP

DRAWN BY

PH

**DART** DART AEROSPACE USA, INC.  
PORT HADLOCK, MA

CHECKED

APPROVED

PH

DRAWING NO.

D3274

REV. D

SHEET 4 OF 4

DATE

06.12.19

TITLE

SKIDTUBE ASSEMBLY

SCALE

1:3

5246

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

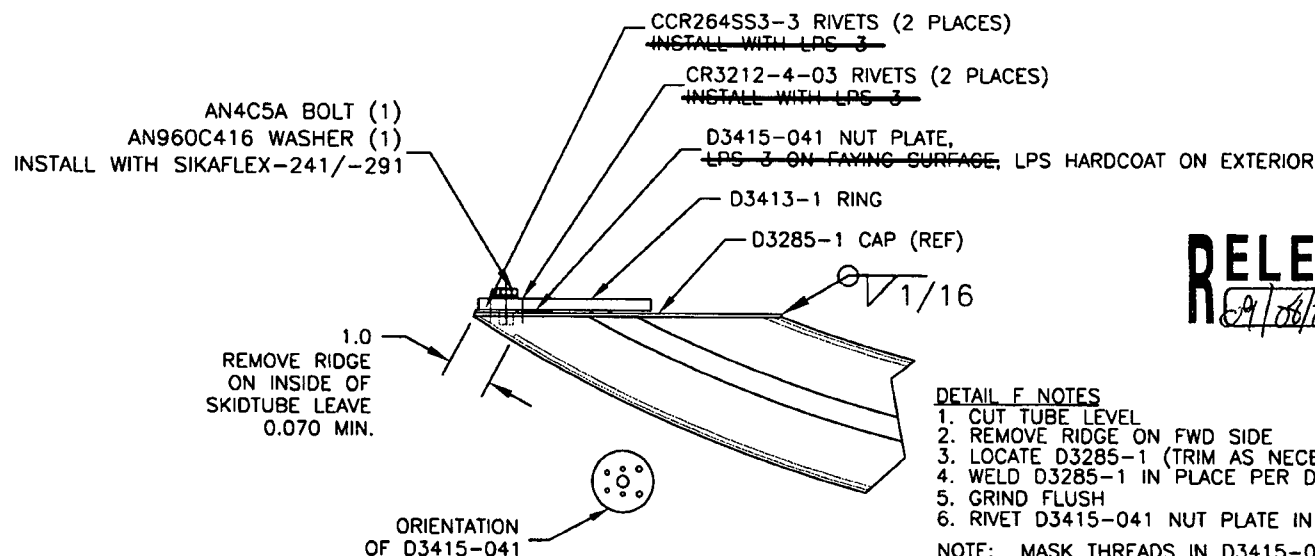
DRAWING NO. D3274	TITLE SKIDTUBE ASSEMBLY	REV. D	<b>DART AEROSPACE USA, INC</b>	D.E.O. NO. D3274-D-1	SHEET NO. SHEET 1 OF 1	SCALE NTS
DRAWN <i>CP</i>	CHECKED <i>[Signature]</i>	MFG. APPR. <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DE APPR. <i>[Signature]</i>		
DATE 09.06.17	DATE 09.06.23	DATE 09/06/23	DATE 09/06/23	DATE 09.06.23		

LPS-3 IS NO LONGER USED DURING ASSEMBLY OF SKIDTUBE.

AMEND NOTE 8: ~~"SPRAY INSIDE OF TUBE WITH A COAT OF LPS LABORATORIES 'LPS 3' AFTER FINISH AND INSTALLATION OF INSERTS.~~  
COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES 'LPS PROCYON' AFTER FINAL ASSEMBLY, CLEAN EXCESS OFF  
POWDER COATING WITH MEK DEGREASER."

AMEND DETAIL F AS SHOWN:

### DETAIL F: END FINISHING DETAIL



#### DETAIL F NOTES

1. CUT TUBE LEVEL
2. REMOVE RIDGE ON FWD SIDE
3. LOCATE D3285-1 (TRIM AS NECESSARY)
4. WELD D3285-1 IN PLACE PER DART QSI 004
5. GRIND FLUSH
6. RIVET D3415-041 NUT PLATE IN PLACE

NOTE: MASK THREADS IN D3415-041  
PRIOR TO FINISH

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

NO. 211

AWS D17.1.2001  
QUALIFICATION TEST RECORD

Name: Barclay Elliott  
Job number: 52411  
Part number: D206-642-541  
Description: 206 skid  
Welding Process: Tig[☒] Mig[ ]  
Base material: Aluminum  
Current: AC[☒] DC[ ]

TEST REQUIREMENTS AND RESULTS

Visual:

pass[☒] fail[ ]

Penetration:

pass[☒] fail[ ]

UNACCEPTABLE

Cracks:

pass[☒] fail[ ]

Undercut:

pass[☒] fail[ ]

Pin holes:

pass[☒] fail[ ]

Overlap (cold lap)

pass[☒] fail[ ]

Porosity (surface):

pass[☒] fail[ ]

Coloration:

pass[☒] fail[ ]

Qualifier Pct. Qual

Date of Test Coupon 09-10-09

Welder Barclay Elliott

Date of Test Coupon 09-10-09

The above named individual is qualified in accordance with AWS D17.1.2001 to weld